A Homebrewer in Siebel's Class

By Richard Sieben

A short introduction is in order here: My name is Richard Sieben and I was born into a brewing family (Sieben's brewing, 1865-1967). I was nine years old when the brewery closed, but I did have occasion to spend some time there with my father who was the brewmaster. I was interested in the process, so when the brewery closed I asked my father if he could make the beer at home. In no uncertain terms, he said it was not possible for many reasons and any homebrewed beer would just be substandard at best. Consequently, I never even looked into home brewing, even when a friend in college told me he home brewed beer (I ·knew· it would taste bad so I didn't even ask to try it). It wasn't until I was taking a marketing class as part of my MBA program in 1995 that home brewing even got a chance, and that only happened because the instructor knew of Sieben's brewery and asked if I was any relation. After I told him I was, within minutes it became my project (class requirement) to do a business plan for a brewpub! What I knew of brewing could effectively been written on the end of a pin, this would require research!!! I soon found The New Complete Joy of Home Brewing and realized that maybe I could make beer after all. I did make a batch, which was ready in time to be included in my final class presentation, and it wasn't bad, and I was hooked.

My brewing dollars were always spent on books and upgrades to the home brewery. I never became a member of the AHA because the only benefit I could see to me was Zymurgy and, for the same money I could subscribe to a monthly magazine instead. Then I saw some positive changes at the AHA that made me reconsider, 1) there were people that I knew who were running for board positions at the AHA and the only way to vote was to be a member, 2) Ray Daniels, who I have met and respect, was taking over the editing of Zymurgy so I expected that it would become a more interesting magazine for me and, 3) there was a chance to win the Siebel Scholarship sponsored by the AHA and Lallemand. That last item REALLY put it over the edge for me.

I entered the AHA/Lallemand drawing just because I could; I really figured I had a fireman's chance in hell of winning! Still, I did win, so I would like to thank the AHA and Lallemand for making this course available and encourage everyone who reads this to sign up for the scholarship next year. I would also like to thank Rob Moline for orchestrating the Siebel Scholarship for home brewers idea. For any of you who want to know more about the Siebel course, my notes from the first couple of days are included

below. These notes are in no way all-inclusive, but rather reflect the items that were of particular interest to me and what I thought other homebrewers may find interesting.

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Editor's Note: We will serialize Rich's detailed observations of the Siebel course over the next several weeks, with a new installment each week. Here is Part 1.

Monday, September 11

9/11

First day of classes, the morning included an overview of the brewing process and the basics of sensory evaluation. The sensory evaluation was already providing me with new information on how to properly taste and smell beer. Hours just seem to fly by as the talks are very engaging. Our class is made up from many levels of experience from the manager of the largest Guinness brewery and some brewpub brewers to a few home brewers.

After lunch, we got into water chemistry, beer styles and brewing techniques. Personally I was ready to delve into the water chemistry as I had some questions, which were promptly answered in a way that was easy for me to understand. Beer styles was a bit of an overview but it tied nicely into he brewing techniques and made it clear how and why the styles with their brewing techniques developed.

After class, discussions with the Siebel instructors about water chemistry, yeast management, beer deposits and how to get rid of them and cleaning regimens were had over beers in the alumni room. This in fact may be some of the most important time spent at Siebel as the instructors can help you understand anything that didn't quite "gel" in class.

I also spent some time in the library and it was very interesting to read brewing books from 1888 and to see my great grandfather's name listed on a directory of brewing related vendors in the Chicago area. (He really had a reputation as a good maltster in the early years of the original Sieben's brewery.)

9/12

Today's classes covered grain, malting, specialty malts, history of brewing, enzymes and the first part of mashing. The opinion on specialty grains from the instructor was that having anything more than a pale/lager 2-row malt, a crystal malt, carapils, chocolate, black malt and a roasted barley was a waste since all flavor profiles from malt are wrapped up in those. He also showed us examples of good vs. poorly made crystal malt. Properly cured crystal malt will be uniform in color, an example of a poorly roasted one looked like it was a mix of two different colors: dark and light. The darkening was only on part of the grains and was apparently due to the husk coming

partly off during roasting, which exposed the sugary insides to higher heat and thus scorching it. I asked if this two-tone crystal would give more of a roasty flavor to the beer instead of the caramel note I was looking for and he said, ·probably·.

Malt milling was covered with pictures and descriptions of various systems. There was also discussion of what works and doesn't work so well and practical examples from breweries. This kind of discussion is far more informative than simple coverage of the different mills; it actually gives you the kind of working knowledge you need to make good value decisions on the kind of mill you would want to use.

The classes on enzymes and mashing went together well and an explanation of the different temperature regimes were covered and when and why to use them. Again, enough information is given so that you can make value decisions on what is likely to be best for you and your brewery. Of particular interest to me was the upward infusion mash, which is used by some brewpubs. There they can slowly raise the temperature of the mash through all rest temperatures by slowly adding hot water to the mash and mixing constantly. This is similar to what I do with my RIMS system except I do temperature steps; maybe an upward infusion could have the same effect with less time? This will be an experiment when I get home sometime.

9/13/00

Mash mixing and hot side aeration was covered at some length in the mashing class. The jury is still out on the importance of hot side aeration and it may be a real brewing ·ghost· (as in there is nothing to it). This was something that was brought up by Japanese brewers of very light beers but polyphenols take up much of that oxygen so it never comes into play. This certainly should be an area of little interest to home brewers because cold side aeration after fermentation is a far bigger problem and home brewers don't make light beers like that for the most part.

Recipe design was covered today and it is done differently on a pro-brewer scale than it is on a home brewer scale. The recipes go from the desired ending beer backwards to what you need to go into it. Giving brew house efficiency a part in the planning of the recipe is something I have noted a need for in recipes for some time and I was not at all surprised to see it as part of the formula. Water usage is similarly calculated with a number of rules of thumb as a starting point, to be refined by experience with each brewery. Hop calculations are much simpler in metric units.

There was also a class on blending formulas, we were told to think in terms of wort streams. The big brewers may make only 3 high gravity brews and then blend them off with each other and carbonated water to make up to 85 different brews. They are making more beers in the cellar than they do in the brew house, what an idea! If you make a beer that didn't turn out as bitter as you would like, just make something that is too bitter and blend those bad boys together! Of course this means you have to have a kegging system to do it, but it gives the brewing process a whole new pallet of flavoring possibilities.

We ended classes for the day with some practical brewing problems that breweries have actually experienced and had to come up with the methods of problem solving and had to solve the problem. This was not easy, but it was a fun exercise. I have read a number of brewing texts, but practical classes like those taught at Siebel make everything really come alive and gives you a much deeper understanding of what I had read before.

After classes today, we went on a field trip to Flatlander's brewpub in Lincolnshire along with the students from the diploma brewing class. The brewer there gave us all a detailed tour of the brewery and freely discussed his joys and trials of his equipment and the way it was set up. This was very useful for understanding the practical application of what we had learned in class so far.